

What Is Claimed Is:

1. A device for predicting the starting ability of a vehicle having an internal combustion engine and a starter which is supplied with electrical power by a vehicle battery (1), characterized by

- a battery state detection device (2) for determining the state of charge (SOC) of the vehicle battery (1),
- a device (5) which uses a discharge current curve ($I_{\text{Batt, disch}}$) to determine the charge (ΔSOC) drained from the vehicle battery (1) during a predefined time period (t_{off}) when the vehicle is shut off,
- a device (9) which calculates the state of charge (SOC_{new}) of the vehicle battery (1) after the predefined time period (t_{off}),
- a device (3) for determining an electrical battery variable (I_{start}) in which a characteristics map of the electrical battery variable (I_{start}) is stored as a function of the state of charge (SOC) of the battery (1), a value of the electrical battery variable (I_{start}), which is present after the predefined time period (t_{off}), being read out from the characteristics map, and
- a prediction device (4) which uses the read out electrical battery value (I_{start}) to determine whether or not the vehicle is able to start after the predefined time period (t_{off}).

2. The device as recited in Claim 1, wherein the characteristics map, stored in the device (3) for determining an electrical battery variable (I_{start}), is a current, voltage, or power characteristics map.

3. The device as recited in Claim 1 or 2, wherein the characteristics map, stored in the device (3) for determining an electrical battery variable, is a function of the temperature (T).
4. The device as recited in one of the preceding claims, wherein a device (6) for predicting the temperature (T) anticipated to prevail after the predefined time period (t_{off}) is provided, the determined temperature (T) being taken into account in the determination of the electrical battery variable (I_{start}).
5. The device as recited in one of the preceding claims, wherein a characteristics map (10) of a mechanical variable of a starting system is stored in the prediction device (4).
6. The device as recited in one of the preceding claims, wherein a torque characteristics map (10) of the starting system and an engine torque characteristics curve (11) are stored in the prediction device (6).
7. The device as recited in Claim 6, wherein the torque characteristics map (10) of the starting system is a function of the state of charge (SOC) of the vehicle battery (1).
8. The device as recited in Claim 6 or 7, wherein the torque characteristics map (10) of the starting system is a function of the temperature (T).
9. The device as recited in one of the preceding claims, wherein a device (6) for measuring an electrical variable (I_{Batt}) of the vehicle battery (1) during a starting operation

is provided and can be used to correct the stored characteristics map.

10. The device as recited in one of the preceding claims, wherein characteristic curves for different starting systems are stored in the device (3) for determining an electrical battery variable (I_{start}).

11. A method for predicting the starting ability of a vehicle having an internal combustion engine and a starter which is supplied with electrical power by a vehicle battery (1), characterized by the following steps:

- Determining the instantaneous state of charge (SOC) of the vehicle battery (1) via a battery state detection device (2),
- Determining the charge (ΔSOC) drained from the vehicle battery (1) during a predefined time period (t_{off}) when the vehicle is shut off,
- Calculating the state of charge (SOC_{new}) of the vehicle battery (1) after the predefined time period (t_{off}),
- Determining an electrical battery variable (I_{start}) on the basis of the calculated future state of charge (SOC_{new}) of the vehicle battery (1) from a characteristics map stored in a device (3),
- Determining whether or not the vehicle is able to start after the predefined time period (t_{off}) via a prediction device (4) which determines the starting ability on the basis of the battery variable (I_{start}) determined from the characteristics map.

12. The method as recited in Claim 11, wherein a characteristics map for a starting current is stored

in the device (3) for determining an electrical battery variable as a function of the state of charge (SOC) of the vehicle battery (1), a starting current (I_{start}), which occurs after the predefined time period (t_{off}), being determined from the characteristics map.

13. The method as recited in Claim 11 or 12, wherein the prediction device (4) carries out a torque comparison between an engine torque (M_{engine}) and a torque ($M_{startsystem}$) of a starting system in order to determine a torque (M) acting in the future.